

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

10/18/2011

Jaclyn Sexton Assistant District Attorney, Norfolk County

Dear ADA Sexton,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Peter Piro.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

#### Curriculum Vitae

## Annie Khan (Dookhan)

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

## Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

## **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

## Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Peter Piro

## **EDUCATION**

Boston Unversity

B.A. in Chemistry and Minor in Biology, 1989

## HONORS

Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry

Valedictorian of the Chemistry Department

# EXPERIENCE

Department of Public Health/State Laboratory Institute

Chemist III, II, I/ Assistant Analyst

December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass

Spectrometry Laboratory. Analyze controlled substances for State and Federal law
enforcement agencies. Qualified as an expert witness in Massachusetts courts and

U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank.

# TRAINING AND ORGANIZATIONS

- \* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- \* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- \* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995.
- \* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- \* Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25<sup>th</sup> 2002, at Agilent Technologies.
- \* Notary Public since 1993.

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

**Boston Hours** 

**Amherst Hours** 

8:00 - 11:00 2:00 - 4:00	DRUG RECE	IPT	9:00 - 12:00 1:00 - 3:00
City or Department:		Police Reference No.:	
Name and Rank of Submitting Officer:	Det w. Ward		
Defendant(s) Name (last, first, initial):			
To be completed by Submitter Description of Items Submitted		To be completed b Gross Weight	y Lab Personnel Lab Number
) p/b of crack rocaine		1,89	
			i
Received by:	_ElO	Date:	3-3-1/

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

**Boston Hours** 

8:00 - 11:00

**DRUG RECEIPT** 

**Amherst Hours** 

9:00-12:00

City or Department:	Police Reference No.:	
Name and Rank of Submitting Officer:	N WARD	
Defendant(s) Name (last, first, initial):		
To be completed by Submitter  Description of Items Submitted	To be completed Gross Weight	by Lab Personnel Lab Number
2 P/B of off-white rock subst.	14.96g	
·		
Received by:	Date:	3-3-11

No.

Date Analyzed:

4-18-11

City: Quincy Police Dept.

Officer: Detective WILLIAM WARD

Def:

1

Amount:

No. Cont:

Cont: pb

Date Rec'd: 03/03/2011

Gross Wt.:

1.89

No. Analyzed:

Net Weight: 〇・入冬

#Tests: 6PD

Subst: SUB

Prelim: Cocarre (1)

Findings:

Date Analyzed: 4-18-11

City: Quincy Police Dept.

Officer: Detective WILLIAM WARD

Def:

Amount: No. Cont:

Cont: pb

Date Rec'd: 03/03/2011

Gross Wt.:

14.96

2

No. Analyzed:

Net Weight: 8-16

Subst: SUB

# Tests: 12A0

· LIPPIA

Prelim: cocourago

Findings:

Folk\_OIG\_PRR\_041998

# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY Que	ANALYST	<i>8999</i>
No. of samples tested:	_	Evidence Wt.	
PHYSICAL DESCRIPTION:		Gross Wt ( ):	0.4238
Off unite	charing substra	Gross Wt ( ):	
	11-87	Pkg. Wt:	
		Net Wt:	0-2832
		•	
•			
PRELIMINARY TESTS Spot Tests		Microcrystalline Tes	its
Cobalt	·	Gold	manadari
Thiocyanate ( -) +		Chloride 4	
Marquis		TLTA (~) +	
Froehde's	· .	OTHER TESTS	•
Mecke's			***************************************
		T	reconstructive convenience of the convenience of th
PRELIMINARY TEST RESULT	<u>'S</u>	GC/MS CONFIRMATORY	'TEST
RESULTS Cocame	<del></del>	RESULTS COSCUST	Contract Constitutes and Const
DATE <u>(1-15-1)</u>		MS PSS NOTARAGO	
		DATE 4-18+11	

# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY Que	va	ANALYST	675
No. of samples tested:		<b>.</b>	vidence Wt.	
PHYSICAL DESCRIPTION:		Gros	ss Wt(2_):	10.4337
08 en ie 0	Juny ELBOTO	<b>←</b> Gros	ss Wt ( ):	The state of the s
	W562		Pkg. Wt:	
			Net Wt:	
		•		
PRELIMINARY TESTS Spot Tests		Microc	rystalline Tests	
Cobalt Thiocyanate ( —) +		Gold 2 Chloride	+	
2 Marquis		2 TLTA (	_)-	
3 Froehde's		<u>011</u>	ER TESTS	
2 Mecke's		Distribution of the second sec	,	
			none filibbonous de la la companya de la la la compa	900000000000000 <del>0000000</del>
			***************************************	
PRELIMINARY TEST RESULTS		GC/MS CON	IFIRMATORY T	EST
RESULTS Cocause	marau.	RESULTS_	cocourà	of consequence of the state of
DATE 4-15-11	<u> </u>	MS OPERATOR	b26	
		DATE	4-18-11	

# # samples tested; 2

#	Gross Welght	Packet Weight	Net Weight	#	Gross Welght	Packet Weight	Net Welght
1	7.3092	1.3027	6.0065	26			
2	3.1243	0.9655	2.1588	27			
3				28			
4				29			
5			**************************************	30			
6				31			
7				.32			
8				33			
9.				34			
10				35			
11	·			36			
12	1,1	Management and the second seco		37	- Million consideration and the constant of th		
13				38			
14	. ,			39			
15				40			and the second s
16	4			41	CONTRACTOR OF THE PROPERTY OF		
17				42			·
18				43			- 44
19				44			
20				45			1974 to the state of the state
21				46			···
22				47			
23			·	48	Managana Anna Managana		
24		·	440	49			
25				50			

Calculations:

Ne+ w+= 8.1653

/PPid 10-14-11

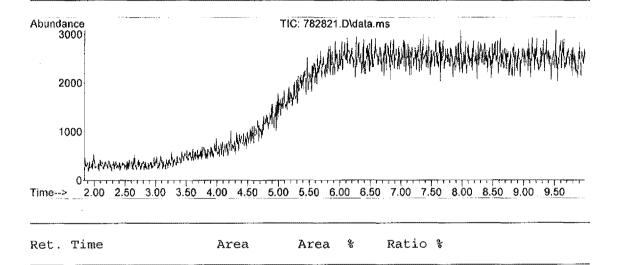
Information from Data File:

File Name : C:\msdchem\1\System7\04\_15\_11\782821.D

Operator : ASD

Date Acquired : 15 Apr 2011 12:46

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

## Area Percent / Library Search Report

Information from Data File:

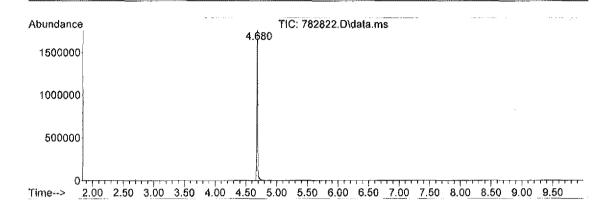
File Name : C:\msdchem\1\System7\04\_15\_11\782822.D

Operator : ASD

Date Acquired : 15 Apr 2011 12:59

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.680	1786936	100.00	100.00

File Name : C:\msdchem\1\System7\04\_15\_11\782822.D

Operator : ASD

Date Acquired : 15 Apr 2011 12:59

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

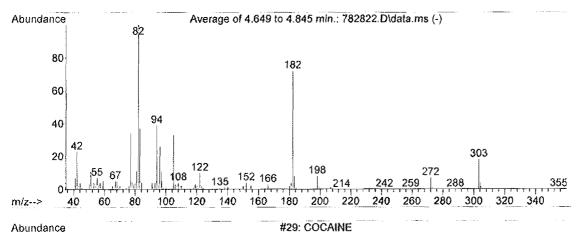
C:\Database\PMW TOX2.L

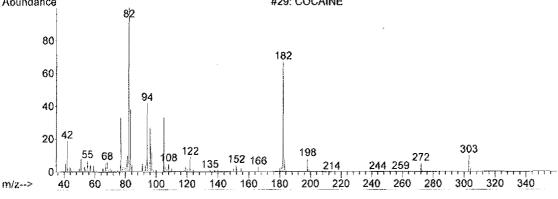
PK# RT Library/ID CAS# Qual

1 4.68 C:\Database\SLI.L

COCAINE

000050-36-2 99



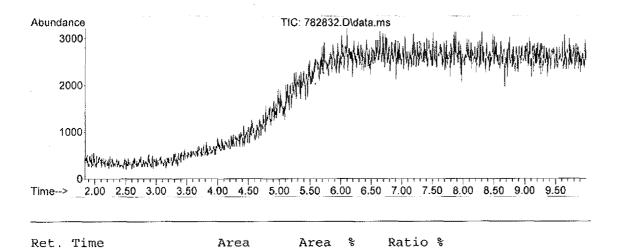


File Name : C:\msdchem\1\System7\04\_15\_11\782832.D

: ASD Operator

Date Acquired : 15 Apr 2011 15:04

Sample Name : BLANK Submitted by : ASD Vial Number 1 AcquisitionMeth: DRUGS.M Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

: C:\msdchem\1\System7\04\_15\_11\782833.D File Name

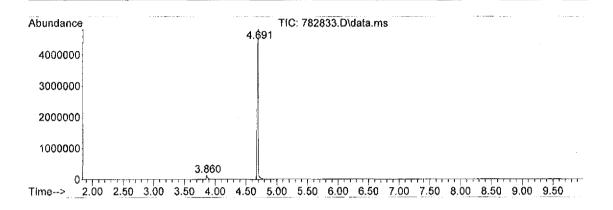
Operator : ASD

Date Acquired : 15 Apr 2011 15:17

Sample Name Submitted by

: ASD 33

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.860	247256		4.39
4.691	5634380		100.00

File Name : C:\msdchem\1\System7\04\_15 11\782833.D

Operator : ASD

Integrator

Date Acquired : 15 Apr 2011 15:17

: RTE

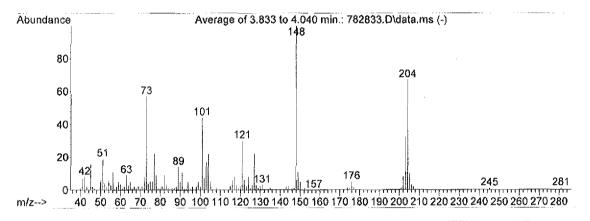
Sample Name :
Submitted by : ASD
Vial Number : 33
AcquisitionMeth: DRUGS.M

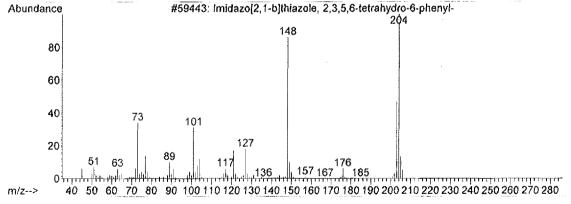
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
 1.	3.86	C:\Database\NIST05a.L			
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet	014769-73-4	98
		Imidazo[2 1-b]thiazole	2.3 5 6-tet	006649-23-6	98





Minimum Quality: 80

File Name : C:\msdchem\1\System7\04\_15\_11\782833.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:17

Sample Name

Submitted by : ASD Vial Number 33 AcquisitionMeth: DRUGS.M Integrator : RTE

C:\Database\SLI.L Search Libraries:

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

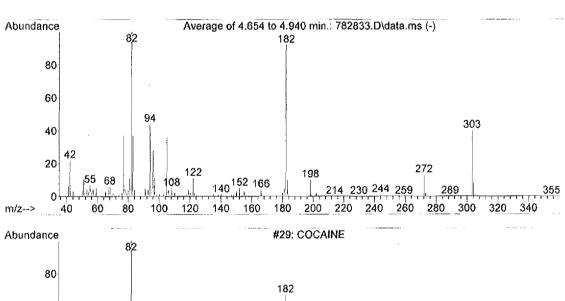
PK# RT Library/ID CAS# Qual

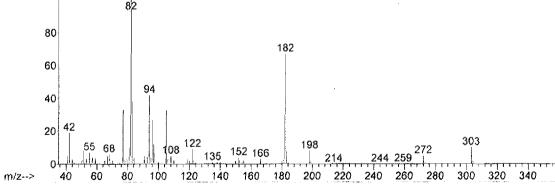
4.69 C:\Database\SLI.L 2

COCAINE

000050-36-2

99



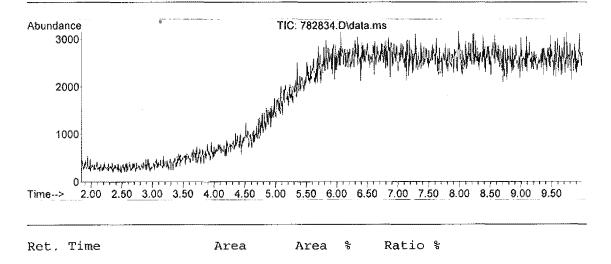


File Name : C:\msdchem\1\System7\04\_15\_11\782834.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:30

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

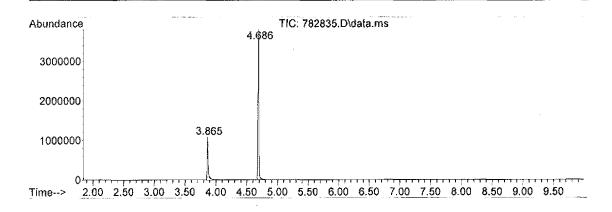
File Name : C:\msdchem\1\System7\04\_15\_11\782835.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:42

Sample Name :

Submitted by : ASD
Vial Number : 35
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.865	1408289		32.19
4.686	4375283		100.00

File Name : C:\msdchem\1\System7\04\_15\_11\782835.D

Operator : ASD

Date Acquired 15 Apr 2011 15:42

Sample Name ASD

Submitted by Vial Number 35 AcquisitionMeth: DRUGS.M Integrator : RTE

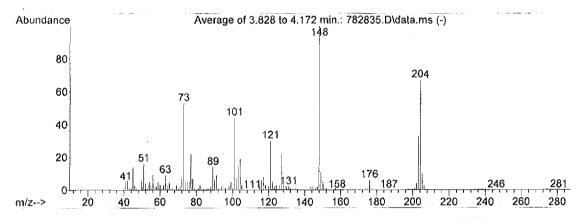
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

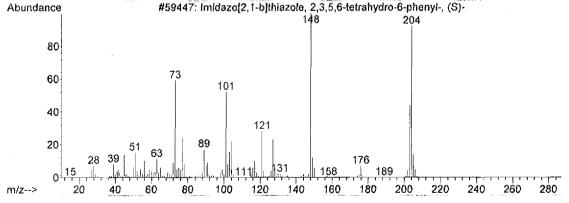
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID		CAS#	Qual
1	3.86	C:\Database\NIST05a.L			
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	99
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98





File Name : C:\msdchem\1\System7\04\_15\_11\782835.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:42

Sample Name : ASD

Submitted by Vial Number 35 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

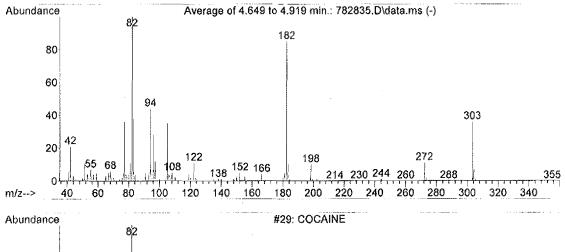
C:\Database\PMW\_TOX2.L

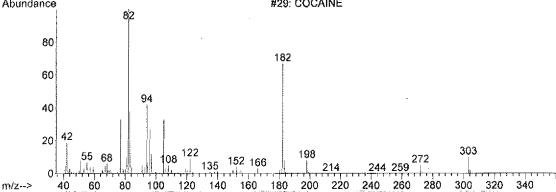
PK# RT Library/ID CAS# Qual

2 4.69 C:\Database\SLI.L

COCAINE

000050-36-2 99





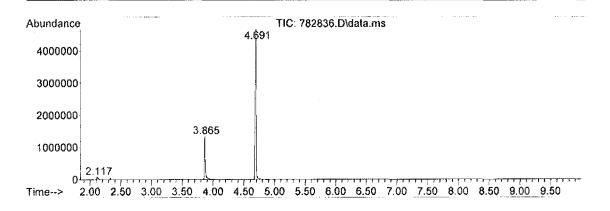
File Name : C:\msdchem\1\System7\04\_15\_11\782836.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:55

Sample Name : Submitted by : ASD Vial Number : 36

Vial Number : 36 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.117	159045	2,21	2.97	
3.865	1694593	23.50	31.63	
4.691	5357631	74.30	100.00	

File Name : C:\msdchem\1\System7\04\_15\_11\782836.D

: ASD Operator

Date Acquired 15 Apr 2011 15:55

Sample Name ASD Submitted by

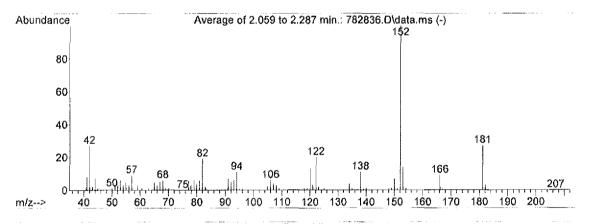
36 Vial Number AcquisitionMeth: DRUGS.M : RTE Integrator

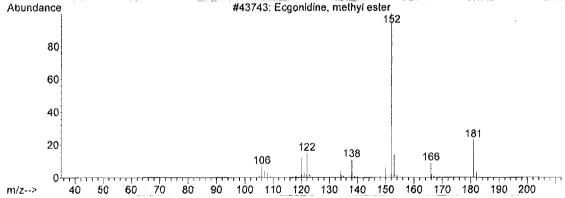
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	2.12	C:\Database\NIST05a.L	100000 04 0	0.5
		Ecgonidine, methyl ester	127379-24-2	97
		2-Carbomethoxy-8-methyl-8-azabicycl	·	96
		3,5-Dimethoxyphenethylamine	003213-28-3	43





File Name : C:\msdchem\1\System7\04 15 11\782836.D

: ASD Operator

Date Acquired 15 Apr 2011 15:55

Sample Name Submitted by : ASD 36 Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

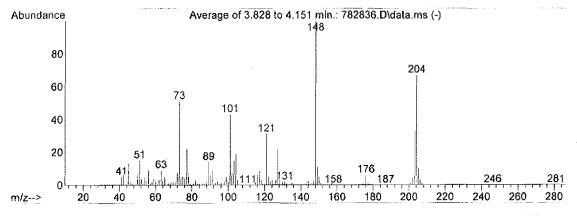
Search Libraries: C:\Database\SLI.L

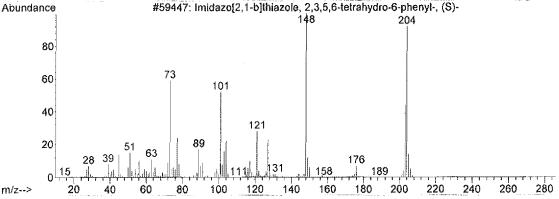
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
 2	3.86	C:\Database\NIST05a.L			
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet	014769-73-4	99
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	98





File Name : C:\msdchem\1\System7\04\_15\_11\782836.D

Operator : ASD

Date Acquired 15 Apr 2011 15:55

Sample Name Submitted by ASD

Vial Number 36 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

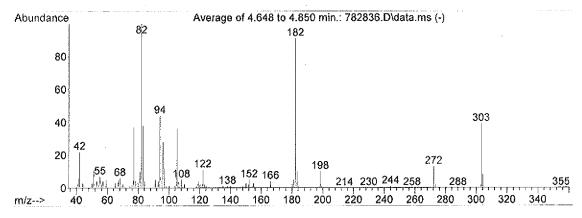
99

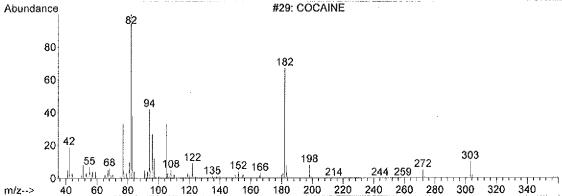
C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

4.69 C:\Database\SLI.L 3

COCAINE 000050-36-2





File Name : C:\msdchem\1\System7\04\_15\_11\782837.D

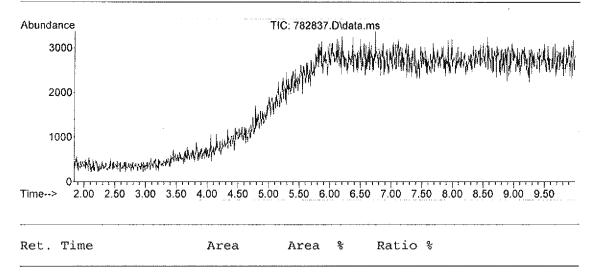
: ASD Operator

Date Acquired : 15 Apr 2011 16:07

Sample Name : BLANK Submitted by : ASD Vial Number 1 AcquisitionMeth: DRUGS.M

Integrator

: RTE



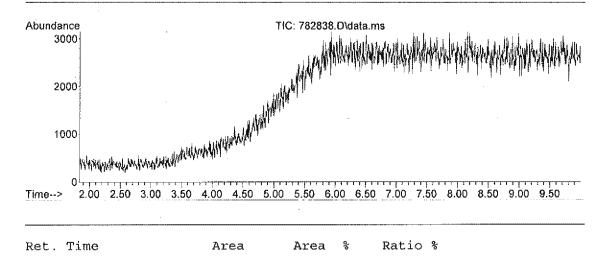
\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : C:\msdchem\1\System7\04\_15\_11\782838.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:20

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

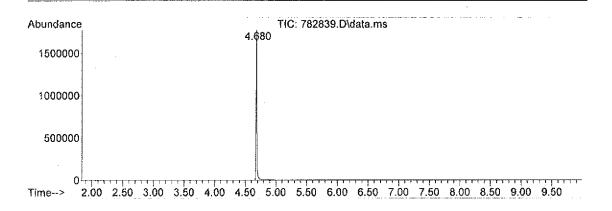
File Name : C:\msdchem\1\System7\04\_15\_11\782839.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:33

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.680	1806342	100.00	100.00

File Name : C:\msdchem\1\System7\04\_15\_11\782839.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:33

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS# Qual

1 4.68 C:\Database\SLI.L COCAINE

AINE 000050-36-2 99

